



State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQE-IN0104060006-08

July 21, 2008

William R. McEwan
Snowbird Utilities Manager
Snowbird Ltd
P.O. Box 929000
Snowbird, Utah 84092-9000

Dear Mr. McEwan:

Re: Intent to Approve: Modification to Approval Order DAQE-AN0406004-02 for Addition of
Natural Gas Boilers, Standby Diesel Generator, and Lift Auxiliary Power Units
Salt Lake County – CDS B; NSPS; Title V Minor
Project Code: N010406-0006

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any questions you may have on this project to Mr. Jon Black. He may be reached at (801) 536-4047.

Sincerely,

Ty L. Howard, Manager
New Source Review Section

TLH:JB:kw

cc: Salt Lake Valley Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modification to
Approval Order DAQE-AN0406004-02 for
Addition of Natural Gas Boilers, Standby
Diesel Generator, and Lift Auxiliary
Power Units**

**Prepared By: Jon L. Black, Engineer
(801) 536-4047
Email: jlblack@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0104060006-08

Date: July 21, 2008

**Snowbird Ltd
Source Contact
William R. McEwan
(801) 933-2054**

**M. Cheryl Heying
Executive Secretary
Utah Air Quality Board**

Abstract

Snowbird Ltd submitted a Notice of Intent requesting a modification to their current Approval order DAQE-AN0406004-02. The modification is for addition of two (2) natural gas fired boilers, one (1) standby diesel generator, and two (2) auxiliary power units. One existing 250 hp auxiliary power unit, located at the Peruvian lift, will be removed. Snowbird Ltd is located in Salt Lake County which is a Non-attainment area of the National Ambient Air Quality Standards (NAAQS) for PM₁₀ and SO₂, and is a Maintenance area for O₃. New Source Performance Standards (NSPS), 40 CFR 60 Subparts A (General Provisions), Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) & IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) regulations apply to this source. National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply to this source. Maximum Achievable Control Technology (MACT) , 40 CFR 63, Subpart A (General Provisions) and Subpart ZZZZ (National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) regulations apply to this source. Title V of the 1990 Clean Air Act applies to this source.

The emissions (in tons per year) will change as follows: PM₁₀ (+) 0.81, NO_x (+) 10.88, SO₂ (+) 0.28, CO (+) 6.80, VOC (+) 0.53, HAPs (+) 0.071. The changes in emissions will result in the following, in tons per year, potential to emit totals: PM₁₀ = 2.48, NO_x = 33.13, SO₂ = 1.04, CO = 34.41, VOC = 2.48, HAPs = 0.071.

The total summation of the PM₁₀, NO_x, and SO₂ emissions increase is 13.08 tons per year. Therefore, the offset requirements of R307-403-5 (Offsets: PM₁₀ non-attainment areas) does not apply.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Salt Lake Tribune and Deseret News on July 26, 2008. During the public comment period, the proposal and the evaluation of its impact on air quality will be available for the public to review and comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This AO applies to the following company:

Corporate Office Location

Snowbird Ltd.
P.O. Box 929000
Snowbird, Utah 84092-9000

Phone Number (801) 933-2232
Fax Number (801) 933-2232

The equipment listed in this AO shall be operated at the following location:

Snowbird, Utah, From the Intersection of SR 210 and SR 209, proceed east on SR210 approximately 7 miles up Little Cottonwood Canyon to Entry #1. Salt Lake County

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
4,491.8 kilometers Northing, 443.9 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
5. All records referenced in this AO or in applicable NSPS and/or MACT standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. Records shall be kept for the following minimum periods:
 - A. Used oil consumption Three years
 - B. Used oil reports Monthly basis
 - C. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
 - D. All other records Five years
6. Snowbird Ltd., (Snowbird) shall install and operate the natural gas boilers, standby diesel generator, and auxiliary power units and shall conduct its operations of the ski and

summer resort in accordance with the terms and conditions of this AO, which was written pursuant to Snowbird's Notice of Intent submitted to the Division of Air Quality (DAQ) on December 19, 2007 and additional information submitted to the DAQ on March 20, 2008.

7. This AO shall replace the AO (DAQE-AN0406004-02) dated June 26, 2002.
8. The approved installations shall consist of the following equipment or equivalent*:

Natural Gas (NG) Fired Boilers

- A. One (1) 15.38 MMBTU/hr NG fired boiler (BG-01)
Backup fuel: Propane
NSPS: Subpart Dc
- B. One (1) 9.23 MMBTU/hr NG fired boiler (BG-02)
Backup fuel: Propane
- C. One (1) 8.37 MMBTU/hr NG fired boiler (BG-03)
Backup fuel: Propane
- D. One (1) 8.37 MMBTU/hr NG fired boiler (BG-04)
Backup fuel: Propane
- E. One (1) 8.37 MMBTU/hr NG fired boiler (BG-05)
Backup fuel: Propane
- F. One (1) 5.23 MMBTU/hr NG fired boiler (BG-06)
Backup fuel: Propane

Auxiliary Power Units:

- G. One (1) 435 hp engine, Gadzoom Lift, (IC-01)
Fuel type: Diesel blend
- H. One (1) 280 hp engine, Aerial Tramway, (IC-02)
Fuel type: Diesel blend
- I. One (1) 1050 hp engine, Peruvian Lift top, (IC-03A)
Fuel type: Diesel blend

- J. One (1) 138 hp engine, Peruvian Lift top, (IC-03B)
Fuel type: Diesel blend
- K. One (1) 160 hp engine, Little Cloud Lift, (IC-04)
Fuel type: Diesel blend
- L. One (1) 180 hp engine, Gad 2 Lift, (IC-05)
Fuel type: Diesel blend
- M. One (1) 137 hp engine, Wilbere Lift, (IC-06)
Fuel type: Diesel blend
- N. One (1) 200 hp engine, Mid-Gad Lift, (IC-07)
Fuel type: Diesel blend
- O. One (1) 100 hp engine, Baby Thunder Lift, (IC-08)
Fuel type: Diesel blend
- P. One (1) 165 hp engine, Chickadee Lift, (IC-09)
Fuel type: Gasoline
- Q. One (1) 435 hp engine, Mineral Basin Quad, (IC-10)
Fuel type: Diesel blend

Standby Generators:

- R. One (1) 102 hp generator, Hidden Peak, (SG-01)
Fuel type: Diesel blend
- S. One (1) 100 hp generator, Maintenance Building, (SG-02)
Fuel type: Gasoline
- T. One (1) 140 hp generator, Mid-Gad Restaurant, (SG-03)
Fuel type: Propane
- U. One (1) 134 hp generator, Iron Blossom Lodge, (SG-04)
Fuel type: Diesel blend

Miscellaneous Equipment:

V. One (1) metal parts cleaner, Maintenance Building, (PC-01)

W. One (1) used oil burner, Maintenance Building

Exempt Equipment:**

X. Various natural gas fired fireplaces, furnaces, boilers and water heaters less than 5 MMBTU/hr

Y. Various natural gas and propane fired kitchen equipment located in Mid-Gad restaurant and base facilities

Z. Gadzoom base, Wilbere Base, and Snowbird Center parking lots

AA. General ventilation units

** This equipment is listed for informational purposes only.

9. Snowbird shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8.A, 8.B, 8.I, 8.J, & 8.U has been completed and is operational. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

Limitations and Test Procedures

10. Visible emissions from the following emission points shall not exceed the following values:

A. All boiler exhaust stacks - 10% opacity

B. All natural gas or propane fired engines – 10% opacity

C. All diesel fired engines - 20% opacity

D. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

Visible emissions from any standby generator or auxiliary power unit shall not exceed 20% opacity after warm-up (15-20 minutes).

11. The following consumption limits shall not be exceeded:
 - A. 287×10^6 ft³/yr of natural gas combusted in the boilers per rolling 12-month period
 - B. 230 hours of operation per rolling 12-month period for each individual auxiliary power unit (Condition #8.G - #8.Q) and standby generator (Condition #8.R - #8.U)

To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of consumption shall be kept for all periods when the plant is in operation. Natural gas and propane consumption shall be determined by monthly billing statements or other approved methods. The records of consumption shall be kept on a monthly basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Fuels

12. The owner/operator shall only use natural gas as a primary fuel and propane as a backup fuel in the six boilers (BG-01, BG-02, BG-03, BG-04, BG-05, BG-06) and the maintenance building. The standby generators and auxiliary power units shall only use #1, #2 or a combination of #1 and #2 diesel fuel (IC-01, IC-02, IC-03A, IC-03B, IC-04, IC-05, IC-06, IC-07, IC-08, IC-10, SG-01, SG-04). The standby generator (SG-03) shall only use propane as fuel.
13. The sulfur content of any fuel oil or diesel burned shall not exceed:
 - A. 0.05 percent by weight for diesel fuels consumed in the equipment listed in Condition #8.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of used oil shall be either by Snowbird Ltd's own testing or test reports from the used oil fuel marketer. Certification of other fuels shall be either by Snowbird Ltd's own testing or test reports from the fuel marketer.

14. The used oil burner used for energy recovery shall comply with the following:
 - A. The concentration/parameters of contaminants in any used oil fuel shall not exceed the following levels:
 - 1) Arsenic 5 ppm by weight

2)	Cadmium	2	ppm by weight
3)	Chromium	10	ppm by weight
4)	Lead	100	ppm by weight
5)	Total halogens	1,000	ppm by weight
6)	Sulfur	0.5	percent by weight

- B. The flash point of all used oil to be burned shall not be less than 100 °F.
- C. The owner/operator shall provide test certification for used oil fuel. Certification shall be either by their own testing or test reports from the used oil fuel marketer. Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation.
- D. Used oil that does not exceed any of the listed contaminants content may be burned. The owner/operator shall record the quantities of oil burned on a daily basis.
- E. Any used oil fuel that contains more than 1000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the boiler. The oil shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to the boiler tank and burned.

- 15. Sources utilizing used oil as a fuel shall comply with the State Division of Solid and Hazardous Waste in accordance with R315-15.

Federal Limitations and Requirements

- 16. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 (General Provisions), Subpart Dc, 40 CFR 60.40c to 60.48c (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) regulations apply to this installation. To be in compliance, this source must operate in accordance with the most current version of 40 CFR 60 applicable to this source.
- 17. In addition to the requirements of this AO, all applicable provisions of 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories Subparts A 40 CFR 63.1 to 63.15 (General Provisions) and ZZZZ, 40 CFR 63.6580 to 63.6675 (National Emission Standard for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines) regulations apply to this installation. To be in compliance, this source must operate in accordance with the most current version of 40 CFR 63.

Volatile Organic Compound (VOC) and Hazardous Air Pollutants (HAPs) Limitations

18. The facilities metal parts cleaner shall abide by all applicable requirements of R307-335 Davis and Salt Lake Counties and Ozone Nonattainment Areas: Degreasing and Solvent Cleaning Operations.

Records & Miscellaneous

19. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on the equipment authorized by this AO shall be recorded.
20. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
21. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emissions estimations below include point source and fugitive emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for this source are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	2.48
B.	SO ₂	1.04
C.	NO _x	33.13

D.	CO.....	34.41
E.	VOC.....	2.48
F.	HAPs	
	Formaldehyde	0.071

The DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

Ty L. Howard, Manager
New Source Review Section